

ABSTRACT

The invention provides an apparatus and a method applied to a plasma display panel or other display panel, achieving a gray scale display by using a plurality of weighted subfields. The apparatus comprises a gray scale limiting/difference diffusion circuit (17) for converting gray scale levels in a supplied image signal to specific gray scale levels that do not easily create pseudo contours in moving picture areas and to intermediate gray scale levels between the specific gray scale levels, and diffusing the difference between the converted gray scale level and the original gray scale level to adjacent pixels, and a dither circuit (19) for generating a video signal to display the converted gray scale level from the circuit (17) alternately in even and odd fields. The dither circuit (19) generates the video signal in which the gray scale levels offset the dither level above and below the dithered gray scale are alternately presented when the converted gray scale level is a dithered gray scale.